APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,022	02/25/2005	Hajime Seki	SEKI3006/FJD	4627

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EXAMINER
NGUYEN, THU N

ART UNIT	PAPER NUMBER
2161	

MAIL DATE	DELIVERY MODE
10/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/526,022	SEKI, HAJIME
	Examiner	Art Unit	
	Thu Nga Nguyen	2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4 and 5* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4 and 5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This action is response to request for re-consideration filed on 8/9/2007.

New claims 4-5 have been added.

Claims 1-3 have been canceled.

Claims 4-5 are pending.

In regard to applicant's remark file on 8/9/2007, the applicant did not argue about

the prior art. The examiner do not need to response to applicant's argument.

Claim Rejections - 35 USC § 101

1.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 4-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed

to non-statutory subject matter.

In regard to claims 4-5, the claims are directed towards non-functional descriptive

material. Each of the claim components ("data file", "advanced mapping file") is an

essentially group of data, which do not provide any direct functionality. Merely claiming

nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable

medium, in a computer, or on an electromagnetic carrier signal, does not make it

statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an

algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical

application of the algorithm was in connection with the programming of a general

purpose computer."). In this case, the non-functional descriptive material is not even

required to be stored in any computer readable medium. As such, the claims lack the

necessary physical articles or objects to constitute a machine or a manufacture within

the meaning of 35 USC 101. They are clearly not a series of steps or acts to be a

process nor are they a combination of chemical compounds to be a composition of

matter. As such, they fail to fall within a statutory category.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 4-5 are rejected under 35 U.S.C. 102(b) as being anticipate by Shang et

al (U.S. Patent No 5,974,531).

4.   As per claim 4, Shang discloses a look-ahead stack management system for

configuring a look-ahead state of an operand stack in a computer system capable of out

-of-order execution, comprising:

a data file having entries each being able to hold data (Shang: Figure 1, column

3 line 50-60, *where the register 17 file operates as on-chip stack cache to store the*

upper entries of a stack); and

an advanced mapping file having entries each being able to hold an entry address in said data file (Shang: Column 3 line 62-67 through column 4 line 1-6 *where the decoded instructions are transmitted to an instruction window for execution*), wherein:

each time a modification is to be made on said operand stack, said advanced mapping file is so managed that, for each entry of said advanced mapping file that is to hold an entry address in said data file allocated to an operand stack element, the address of the entry of said advanced mapping file is to indicate the number of operand stack elements over said operand stack element (Shang: Column 3 lines 50-67 through column 4 lines 1-6, and column 14 lines 9-30).

As per claim 5, Shang discloses a look-ahead stack management system for configuring a look-ahead state of an operand stack in a computer system capable of out-of-order execution, comprising:

a data file having entries each being able to hold data (Shang: Figure 1, column 3 line 50-60, *where the register 17 file operates as on-chip stack cache to store the upper entries of a stack)*; and

an advanced mapping file having entries each being able to hold an entry address in said data file (Shang: Column 3 line 62-67 through column 4 line 1-6 *where the decoded instructions are transmitted to an instruction window for execution*), wherein:

each time a modification is to be made on said operand stack, said advanced mapping file is so managed that, for each entry of said advanced mapping file holding an entry address in said data file allocated to an operand stack element, if the entry of said advanced mapping file is to hold an entry address in said data file allocated to an operand stack element, the number of operand stack elements over the operand stack element whose value is held / to be held in the entry of said data file indicated by the address held in the entry of said advanced mapping file is to be unchanged (Shang: Column 3 lines 50-67 through column 4 lines 1-6, and column 14 lines 9-30).

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Nga Nguyen whose telephone number is 571-270-1765. The examiner can normally be reached on Mon-Thurs from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

September 28, 2007

APU MUFIZ
SUPERVISORY PATENT EXAMINER